

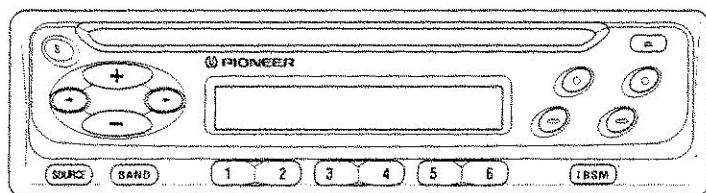
**High power CD player  
with FM/AM tuner**

**Puissant lecteur de CD  
avec syntoniseur FM/AM**

**SUPER  TUNER III**

# DEH-223

## Operation Manual Mode d'emploi



 **PIONEER®**  
*The Art of Entertainment*

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## About This Manual

This tuner/CD player features a number of sophisticated functions ensuring superior reception and operation. All are designed for the easiest possible use, but many are not self-explanatory. This operation manual is intended to help you benefit fully from their potential and to maximize your listening enjoyment.

We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using the tuner/CD player. It is especially important that you read and observe the "Precautions" on this page and in other sections.

## Precautions

**CAUTION: USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

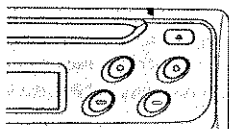
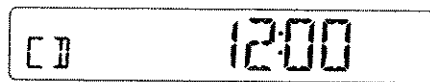
**CAUTION: THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.**

- \* Keep this manual handy as a reference for operating procedures and precautions.
- \* Always keep the volume low enough for outside sounds to be audible.
- \* Protect the tuner/CD player from moisture.
- \* If the battery is disconnected, the preset memory will be erased and must be reprogrammed.
- \* If this product fails to operate properly, contact your dealer or your nearest authorized Pioneer Service Station.

## Displaying the time

- To turn the time display ON or OFF, press the **Clock** button with the Source ON.

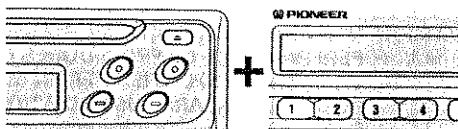
The time display disappears temporarily when you perform another operation, but the time indication returns to the display after 25 seconds.



## Setting the time

### Setting the Hours

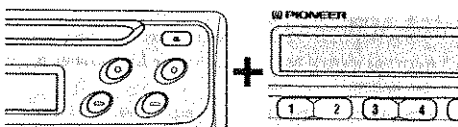
- While holding down the **Clock** button, press button **1** to set the hour.



### Setting the Minutes

- While holding down the **Clock** button, press button **2** to set the minute.

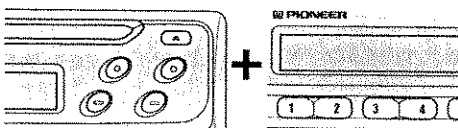
When you release the **Clock** button, the second count begins from 00 seconds.



- While holding down the **Clock** button, press button **3** to reset the minute and second indications to zero.

(eg. If the clock is reset while a time in the "11:30" — "12:29" range is displayed, the indication changes to "12:00".)

Note: The hour and minute can be advanced by pressing the respective buttons either consecutively or continuously.

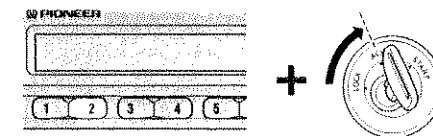


## Changing the AM Tuning Step

The tuning step employed in the tuner's AM band can be switched between 9 kHz and 10 kHz per step. Reset the tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America.

- While holding down button **2**, turn the ignition from OFF (Lock) to ON (ACC).

Specifications		Initial Setting	New Setting
AM	Tuning Steps	9 kHz	10 kHz
	Frequency range	531 — 1,602 kHz	530 — 1,710 kHz

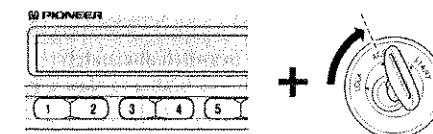


## Changing the FM Tuning Step

The tuning step employed by Seek Tuning in the FM mode can be switched between 100 kHz (preset at the factory) and 50 kHz.

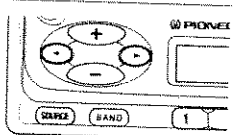
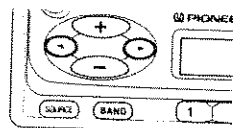
- While holding down button **1**, turn the ignition from OFF (Lock) to ON (ACC).

Note: If Seek Tuning is performed in 50 kHz steps, stations may be tuned in imprecisely. Tune in the stations with Manual Tuning or use Seek Tuning again.



## Tuner Source and Band

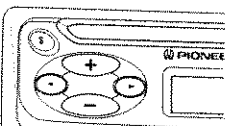
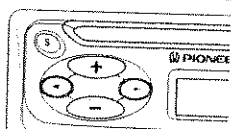
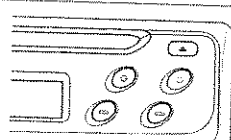
- Push the **SOURCE** button to select Tuner.  
The Frequency appears on the display.  
"STEREO" indicator lights when stereo station selected.
- Use the **BAND** button to select the desired band.  
(FM1, FM2, FM3, AM)



## Manual and Seek Tuning

Both Manual (step-by-step) and Seek (automatic) tuning are available.

1. Press the **MANU** button to switch alternately between the Manual and Seek tuning modes.  
The "MANU" indicator lights when Manual tuning is selected and turns OFF when Seek tuning is selected.
2. Press the (▶) button to tune the receiver to a higher frequency.  
MANU ON (Manual tuning):  
The frequency changes step by step.  
MANU OFF (Seek Tuning):  
The tuner automatically seeks out and receives broadcasting stations.
- Press the (◀) button to tune the receiver to a lower frequency.

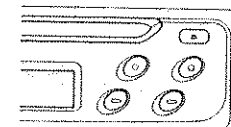


## Local Seek Tuning

This mode selects only stations with especially strong signals.

### To Select Local Mode

- Press the **Local** button to enter the Local mode.  
"LOC" indicator lights.  
To cancel the Local mode, press the Local button again.



### Adjusting Local Seek Sensitivity

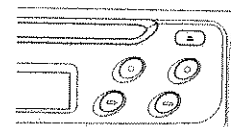
The Sensitivity can be adjusted in 4 steps for FM and 2 steps for AM.

1. Depress the **Local** button for 2 seconds or longer.

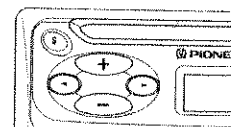
The current Local Seek sensitivity (eg. "LOC-2") is displayed.

Repeat to switch in and out of the Local Seek Sensitivity setting mode.

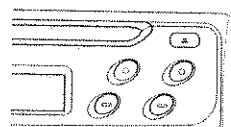
The display reverts to the previous indication after 5 seconds of inactivity.



2. Use the (◀) button or the (▶) button to raise or lower the sensitivity of Local Mode Seek tuning.



3. Press the **Local** button to return normal display.



## Preset Tuning

Up to 18 FM stations (6 each in FM1, FM2 and FM3) and 6 AM stations can be stored in memory.

Store the stations in memory under buttons 1-6 beforehand with the BSM (Best Stations Memory) or Preset Memory function.

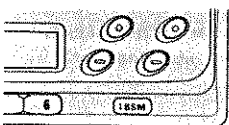
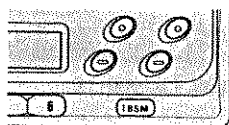
## BSM (Best Stations Memory)

The BSM function stores stations in memory automatically.

- Press the **BSM** button for 2 seconds or longer to activate the BSM mode.  
"BSM" starts flashing on the display.

The stations with the strongest signals will be stored under buttons 1-6 and in order of their signal strength.

- To cancel the process before completion, press the **BSM** button again.



## Preset Memory

The Preset Memory function stores stations in memory manually.

1. Select the station whose frequency you want to store in memory.

2. Press one of buttons 1-6 for 2 seconds or longer.

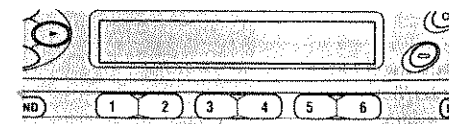
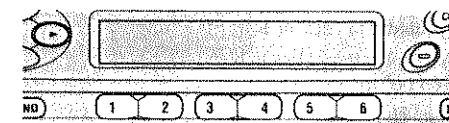
The station is stored in memory under the selected button.

The selected preset number blinks on the display, then changes to a steady indication when input is completed.

## Recalling Preset Stations

- Press one of buttons 1-6 to recall a station preset under that button.

The recalled preset number is shown on the display.



## Audio Adjustment

The audio modes are selected for adjustment with the S button. Volume adjustment is the default mode. When another mode is selected for adjustment, the setting returns to the Volume mode after 8 seconds.

### Volume Adjustment

- Press the (+) button or the (-) button repeatedly to raise or lower the volume.

The display shows low to high volumes from "VOL00" to "VOL30."

Note: Holding down the buttons increases or decreases the volume level more rapidly.

### Balance Adjustment

The function allows you to select a Fader/Balance setting that provides ideal listening conditions in all occupied seats.

1. Press the S button once to select the Fader/Balance mode.

"F-" or "B-" appears on the display.

After adjustment use the S button to return to the normal display.

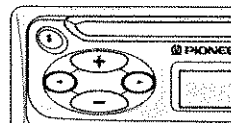
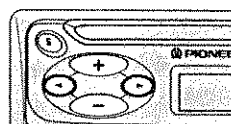
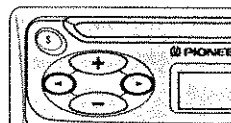
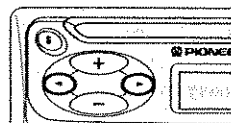
2. Press the (+) button or the (-) button to shift the balance progressively to the front or rear speakers.

"F-F15" ~ "F-R15" is displayed as it moves from front to rear.

Note: "F-0" is the proper setting when 2 speakers are in use.

3. Press the (◀) button or the (▶) button to shift the balance to the left or right speaker, respectively.

"B-L9" ~ "B-R9" is displayed as it moves from left to right.



### Bass/Treble Adjustment

This tuner/CD player is equipped with two tone adjustment modes, the Bass Adjustment and Treble Adjustment modes.

1. Press the S button 2 times to select tone adjustment mode.

"BAS" or "TRE" appears on the display.

After adjustment use the S button to return to the normal display.

2. Press the (◀) button or the (▶) button to select "Bass Adjustment mode" or "Treble Adjustment mode".

3. Press the (+) button or the (-) button, respectively, to increase or decrease the intensity of the bass or treble, whichever is selected.

The display shows "+6" ~ "-6".

4. Repeat steps 2-3 above for the other Bass or Treble Adjustment mode.

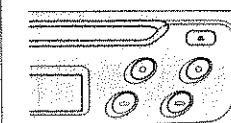
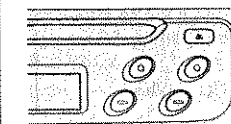
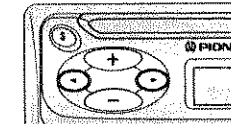
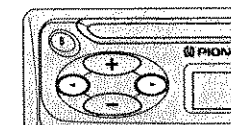
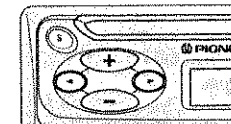
### Loudness Adjustment

The Loudness function compensates for deficiencies in the low and high sound ranges at low volume.

- Press the LOUD button to activate the Loudness function.

"LOUD" indicator lights.

- To cancel the Loudness function, press the LOUD button again.



## Disc Selection and Care

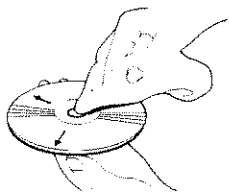
- Play only CDs bearing the Compact Disc Digital Audio mark.



- Check all CDs before playing, and discard cracked, scratched or warped discs.



- Wipe dirty or damp discs outward from the center with a soft cloth.



- Avoid touching the recorded (iridescent) surface when handling discs.

- Store discs in their cases when not in use.

### Precaution:

- \* Keep discs out of direct sunlight and high temperatures.
- \* Do not affix labels or apply chemicals to discs.
- \* Condensation may collect inside the player when using the heater in cold weather, interfering with playback. Turn it off for an hour or so and wipe damp discs with a soft cloth.
- \* Road shocks may interrupt CD playback.

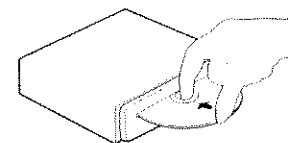
The built-in CD player plays one standard 12 cm or 8 cm (single) CD at a time. Do not use an adapter when playing 8 cm CD.

CD TRK05

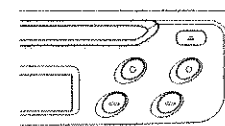
## Inserting and Removing Discs

- Insert the disc with the recorded (iridescent) surface down.

CD playback begins immediately, whether or not the player is ON or the built-in CD source selected. The track number and playing time are displayed.



- Press the Eject button to eject any disc loaded in the disc slot.

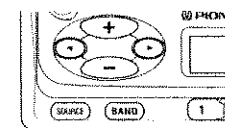


## Playing the Built-in CD player

- To play a CD that is already loaded, press the **SOURCE** button with a CD loaded to select the built-in CD player.

The built-in CD player is selected only when a CD is loaded.

Note: See "Audio Adjustment" on pages 10-11 for volume and tone adjustment.

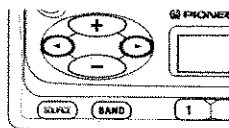


- To stop CD playback, press the **SOURCE** button to select the tuner or turn the source **OFF**.

When the built-in CD player is selected again, playback begins at approximately the same place (track/playing time).

## Precaution:

- Inserting more than one disc at a time may damage the built-in CD player.
- Discs left partially inserted after ejection may incur damage or fall out.
- If a disc cannot be inserted fully or playback fails, make sure the recorded side is down, push the Eject button and check the disc for damage before reinserting it.
- If a CD is inserted with the recorded side up, it will be ejected automatically after a few moments.
- If the built-in CD player cannot operate properly, an error message (such as ER-14) appears on the display. Refer to "CD Player Troubleshooting" on page 18.



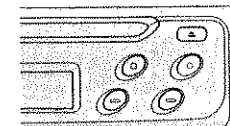
## Track Search and Fast-forward/Reverse

### Switching the Mode

- Press the **MANU** button to switch between "MANU" indicator **ON** and **OFF**.

When performing a Track Search, switch the "MANU" indicator **OFF**.

When performing Fast-forward/Reverse operations, switch playback time appears and the "MANU" indicator **ON**.

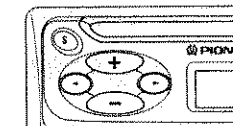


### Track Search

This feature permits you to select a specific track on the CD by number.

- Press the (**◀**) button or the (**▶**) button to reverse or advance track by track.

Hold down the button continuously for high-speed forward or reverse track searching. The track number and playing time change appropriately on the display.



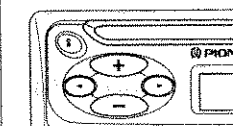
### Fast-forward/Reverse

This feature enables you to advance or reverse at high speed between tracks.

- Press the (**◀**) or (**▶**) button to reverse or fast-forward through tracks.

When the beginning or end of a track is reached, playback skips to the next track. The track number and playing time change appropriately on the display.

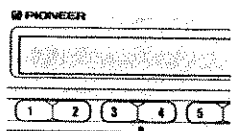
Note: The audio is audible as a high-pitched screeching during fast-forward and reverse.





## Pause

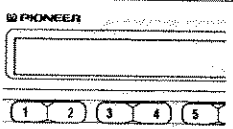
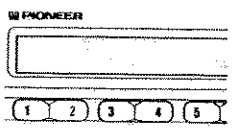
- Press button 1 to stop playback temporarily. "PAUSE" is displayed. Push the button again to restart playback.



## Built-in CD Player Repeat Modes

The built-in CD player offers two repeat modes: Disc Repeat (normal play), the default mode, and One-track Repeat.

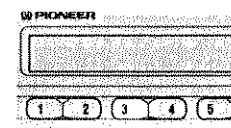
- To select One-track Repeat, press button 2. "RPT" appears on the display.  
Note: When Track Number Search or fast forward/reverse is performed, the mode returns to the default Disc Repeat mode (normal play).
- Press the button 2 again to return to the Disc Repeat mode (normal play). "RPT" disappears.



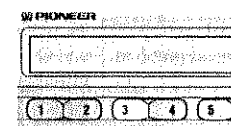
## Random Play

The Random Play mode plays the tracks on a CD in random order for variety.

- To enter the Random Play mode, press button 3. "RDM" appears on the display.



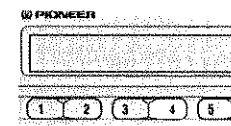
- Press button 3 again to cancel Random Play.  
Note: Since playback is random, the same track may be repeated consecutively.



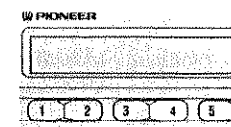
## Scan Play

Scan Play plays the first 10 seconds or so of each track on a CD in succession.

- Press button 4 to start Scan Play. "SCN" appears on the display.



- Push button 4 again to cancel Scan Play when you hear a track you are want to listen to.  
Playback of the current track continues.  
Note: Scan Play is canceled automatically after all the tracks on a disc have been scanned.



## CD Player Troubleshooting

When problems occur with CD playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Station.

Message	Possible cause	Recommended action
ER- 11, 12, 14, 17, 30	Dirty disc.	Clean the disc.
ER- 11, 12, 17, 30	Scratched disc.	Replace the disc.
ER- 14	Unrecorded CD.	Check the disc.
ER- 10, 11, 12, 14, 17, 30, A0	Electrical or mechanical problem.	Turn the ignition ON and OFF, or switch to a different source, then back to the CD player.
HEAT	CD player overheating.	Discontinue play until the machine temperature drops.

## Specifications

### General

Power source	14.4 V DC (10.8 — 15.1 V allowable)
Grounding system	Negative type
Max. current consumption	10.0 A
Dimensions	
(DIN) (chassis)	178 (W) × 50 (H) × 150 (D) mm
(nose)	188 (W) × 58 (H) × 22 (D) mm
(D) (chassis)	178 (W) × 50 (H) × 155 (D) mm
(nose)	170 (W) × 46 (H) × 17 (D) mm
Weight	1.5 kg

### Amplifier

Continuous power output is 15 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.	
Maximum power output	35 W × 4
Continuous power output	15 W × 4 (1% dist. at 1 kHz)
Load impedance	4 Ω (4 — 8 Ω allowable)
Preout output level/output impedance	500 mV/ 1 kΩ
Tone controls	
(Bass)	±12 dB (100 Hz)
(Treble)	±12 dB (10 kHz)
Loudness contour	+10 dB (100 Hz), +7 dB (10 kHz) (volume: -30 dB)

## Specifications

### CD player

System .....	Compact disc audio system
Usable discs .....	Compact disc
Signal format .....	Sampling frequency: 44.1 kHz Number of quantization bits: 16; linear
Frequency characteristics .....	20 — 20,000 Hz ( $\pm 1$ dB)
Signal-to-noise ratio .....	94 dB (1 kHz)(IEC-A network)
Dynamic range .....	90 dB (1 kHz)
Number of channels .....	2 (stereo)

### FM tuner

Frequency range .....	87.5 — 108 MHz
Usable sensitivity .....	11 dBf (1.0 $\mu$ V/75 $\Omega$ , mono, S/N: 30 dB)
50 dB quieting sensitivity .....	16 dBf (1.7 $\mu$ V/75 $\Omega$ , mono)
Signal-to-noise ratio .....	70 dB (IEC-A network)
Distortion .....	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response .....	30 — 15,000 Hz ( $\pm 3$ dB)
Stereo separation .....	40 dB (at 65 dBf, 1 kHz)

### AM tuner

Frequency range .....	531 — 1,602 kHz (9 kHz)
	530 — 1,710 kHz (10 kHz)
Usable sensitivity .....	18 $\mu$ V (25 dB) (S/N: 20 dB)
Selectivity .....	50 dB ( $\pm 9$ kHz)
	50 dB ( $\pm 10$ kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

## FRANÇAIS

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